DATA for Programmers, Scientists & Hackers

Introduction to physical and virtual data; in memory and stored on media. Linear and non linear organizational methods. All programming assignment result in graphical interactive entertainment.

Presentations:

- linear data (memory and virtual)
- lists
- trees
- graphs
- problems

Topics:
- analysis
- design
- testing
- quality
- metrics

Common programming tools & methods:

- Ruby / Rails / Linux
- GLUT/OpenGL
- English
- Collaboration
- CED methods

Techniques:

- stack
- recursion
- allocation
- queue
- sorting
- compression
- sparse arrays
- records / tables / files

Meeting Times: on N.B. main web page Location: NoiseBridge, San Francisco	Presenters: Stan, Sid, Dan
Suggested requisite knowledge: • capability to create small programs from written requirements • capability to learn simple abstract logic and discrete mathematics	Some or all presentations will be recorded as video. If possible the raw video will be posted. If resources permit edited versions may also be posted.

Recommended reading and references:

"Computer Science Programming Basics in Ruby," (Exploring Concepts and Curriculum with Ruby), by ,Ophir Frieder, Gideon Frieder, David Grossman Publisher:: O'Reilly Media, April 2013,
Print ISBN: 978-1-4493-5597-5 , Ebook ISBN: 978-1-4493-5596-8.

"Art of Computer Programming," by Donald Knuth, Vol 1-4, Publisher: Addison-Wesley Professional; March 2011, ISBN-13: 978-0321751041

"The Mythical Man-Month: Essays on Software Engineering", Anniversary Edition (2nd Edition), by Frederick P. Brooks Jr., Publisher: Addison-Wesley Professional; August 12, 1995, Print ISBN-13: 978-0201835953.